

NOTIFICATION APPLIANCE CIRCUIT
POWER REQUIREMENTS – 3RD FLOOR

DESCRIPTION	CURRENT PER APPLIANCE	# OF APPLIANCES			
		CIRCUIT AV7	CIRCUIT AV8	CIRCUIT AV9	CIRCUIT AV9
WHEELLOCK HORN/STROBE 15 cd	0.066	4	3	0	
WHEELLOCK HORN/STROBE 30 cd	0.101	1	0	2	
WHEELLOCK HORN/STROBE 75 cd	0.177	1	0	0	
WHEELLOCK HORN/STROBE 110 cd	0.232	0	2	2	
WHEELLOCK-STROBE 15 cd	0.060	2	0	1	
TOTAL CIRCUIT CURRENT		0.662	0.662	0.726	

NOTES:

THE FOLLOWING NOTIFICATION APPLIANCES AND THEIR POWER DEMANDS WERE USED IN THE DESIGN:

1. WHEELLOCK INC. HS4-24MCW, 1500 WALL MOUNTED HORN/STROBE; 0.066 AMP MAX UL POWER DEMAND; RATED 16 TO 33 AMP
2. WHEELLOCK INC. SERIES HS4-24MCW, 3000 WALL MOUNTED HORN/STROBE; 0.101 AMP MAX UL POWER DEMAND; RATED 16 TO 33 AMP
3. WHEELLOCK INC. SERIES HS4-24MCW, 7500 WALL MOUNTED HORN/STROBE; 0.177 AMP MAX UL POWER DEMAND; RATED 16 TO 33 AMP
4. WHEELLOCK INC. SERIES HS4-24MCW, 11000 WALL MOUNTED HORN/STROBE; 0.232 AMP MAX UL POWER DEMAND; RATED 16 TO 33 AMP
5. WHEELLOCK INC. SERIES HS4-24MCW, 1500 WALL MOUNTED STROBE; 0.060 AMP MAX UL POWER DEMAND; RATED 16 TO 33 AMP

VOLTAGE DROP CALCULATIONS

(I) (D) (21.6)/CM
WHERE:
I = CIRCUIT POWER LOAD
D = CONDUCTOR ONE WAY DISTANCE
21.6 = CONSTANT
CM = CROSS-SECTION AREA OF WIRE (4110 FOR AWG#14)

NAC AV7 (0.662 AMP) (700 FT) (21.64)/4110	VOLTAGE DROP: 2.440 VOLTS	AVAILABLE VOLTAGE: 21.560 VOLTS
NAC AV8 (0.662 AMP) (700 FT) (21.64)/4110	VOLTAGE DROP: 2.440 VOLTS	AVAILABLE VOLTAGE: 21.560 VOLTS
NAC AV9 (0.726 AMP) (700 FT) (21.64)/4110	VOLTAGE DROP: 2.676 VOLTS	AVAILABLE VOLTAGE: 21.324 VOLTS

THE CIRCUIT'S AVAILABLE VOLTAGE IS ABOVE THE MINIMUM LISTED VOLTAGE FOR THE APPLIANCES.

OBSOLETE. REFER TO VOLTAGE DROP CALCULATIONS
SHOWN ON SIEMENS DRAWING FA-03.

NOTIFICATION APPLIANCE CIRCUIT
POWER REQUIREMENTS – 2ND FLOOR
FROM SIEMENS DRAWING FA-03

CIRCUIT	DISTANCE	ORIGINAL VOLTAGE (VOLTS)	ORIGINAL AVAILABLE VOLTAGE (VOLTS)	NEW LOAD (AMPS)	NEW VOLTAGE (VOLTS)	NEW AVAILABLE VOLTAGE (VOLTS)
AV8	700	0.852	31.34	20.866	0.952	30.491
AV9	700	0.822	3.024	20.976	0.947	20.510

NOTES:

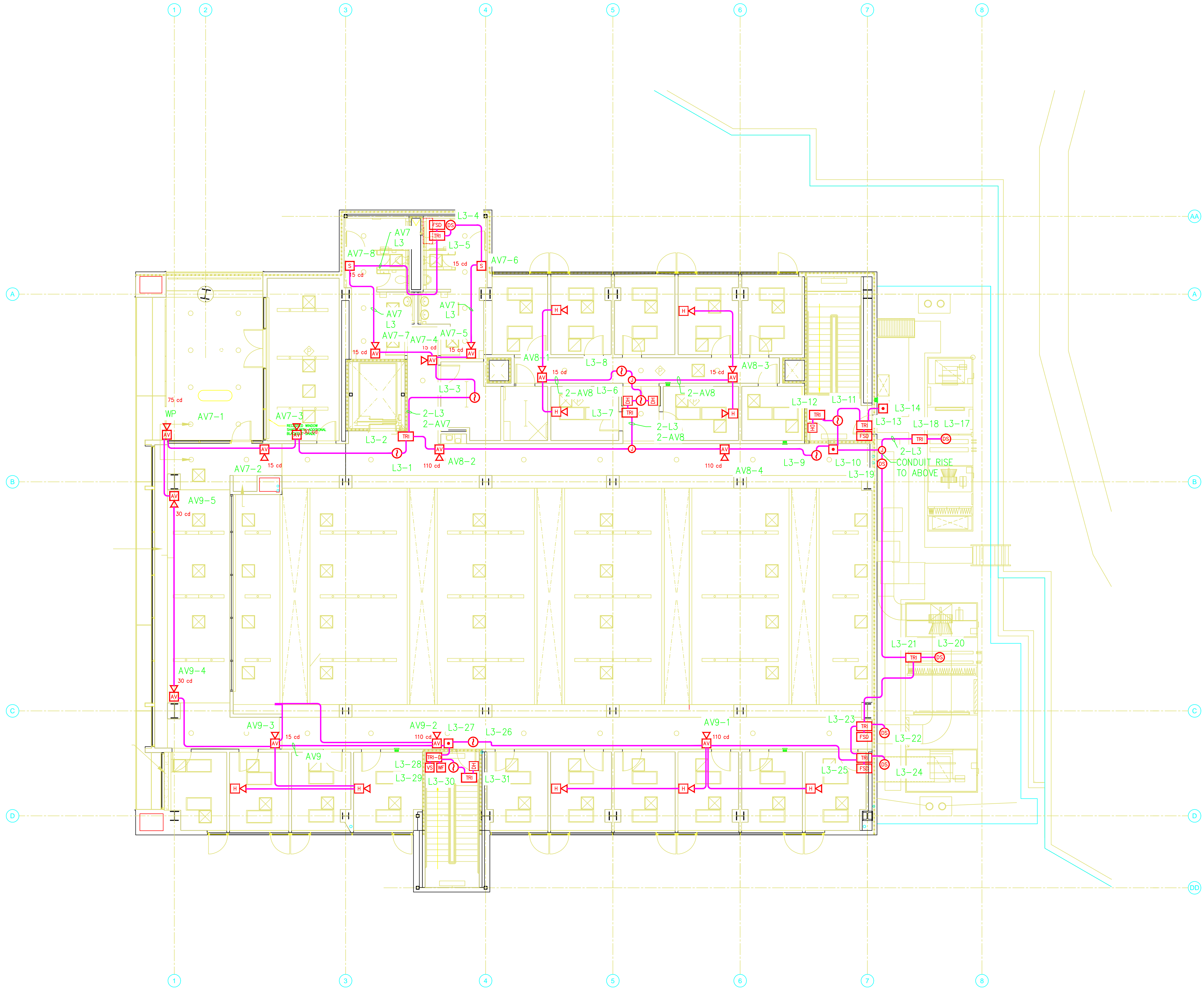
THE FOLLOWING SIEMENS HORNS AND ASSOCIATED LOADS WERE USED FOR THESE CALCULATIONS.
OTHER HORNS MAY BE USED PROVIDED THEIR CURRENT DRAW DOES NOT EXCEED THOSE SHOWN FOR
THESE CALCULATIONS:

1. SIEMENS SERIES AH, WALL MOUNTED HORN; 0.025 AMP MAX UL POWER DEMAND (MIDDLES
SETTING FOR 84 DBA); RATED 16 TO 33 AMP

THE CIRCUIT'S AVAILABLE VOLTAGE IS ABOVE THE MINIMUM LISTED VOLTAGE FOR THE APPLIANCES.

RACEWAY NOTES:

1. UNLESS NOTED OTHERWISE, THE RACEWAYS SHOWN ON
THIS SHEET CONTAIN CIRCUITS L3, AV7, AV8 & AV9.



2 ROOF FIRE ALARM – PARTIAL PLAN
FA2.3 SCALE: 1/8"=1'-0"

1 THIRD FLOOR FIRE ALARM
FA2.3 SCALE: 1/8"=1'-0"

0 8 FT 16 FT 24 FT
SCALE: 1/8"=1'-0" UNO

WRNSSTUDIO

601 SECOND STREET
4TH FLOOR, STE. 402
SAN FRANCISCO
CALIFORNIA 94107
415.489.2224 TEL
415.358.9100 FAX
WWW.WRNSSTUDIO.COM

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Sheet: 1



HYT Corporation
Fire Protection Engineers
and Consultants

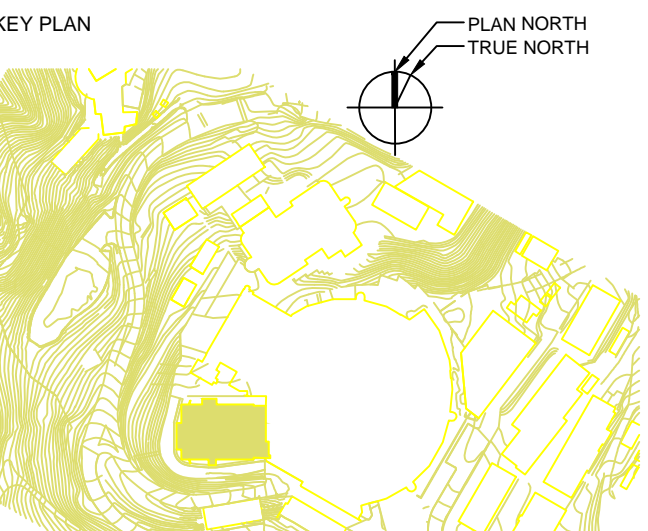
3498 Clayton Road - Suite 101
Concord, California 94519
Phone: (925) 681-2731
FAX: (925) 681-2733

NO. ISSUES/REVISIONS DATE

FINAL AS-BUILT'S RECORD DRAWINGS 02-18-11

RECORD DRAWING NOTE:
SEE ALSO SIEMENS
INDUSTRY, INC. "AS BUILT"
PLANS (IOB 440P-065295) FOR
ADDITIONAL INFORMATION
AND CONTRACTOR DETAILS

LBNL ADVANCED
LIGHT SOURCE USER
SUPPORT BUILDING 15
BERKELEY, CA



PROJECT NO.: 07004.00 DRAWN BY: DWH
DATE: 2/18/2011 CHECKED BY: BBT
SCALE: 1/8" = 1'-0"

SHEET TITLE:

THIRD FLOOR PLAN
FIRE ALARM

5N15E044

SHEET NO:

FN1421

FA-2.3